

=> fil reg
 FILE 'REGISTRY' ENTERED AT 16:34:14 ON 13 AUG 2008
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STRUCTURE FILE UPDATES: 12 AUG 2008 HIGHEST RN 1040486-81-4
 DICTIONARY FILE UPDATES: 12 AUG 2008 HIGHEST RN 1040486-81-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

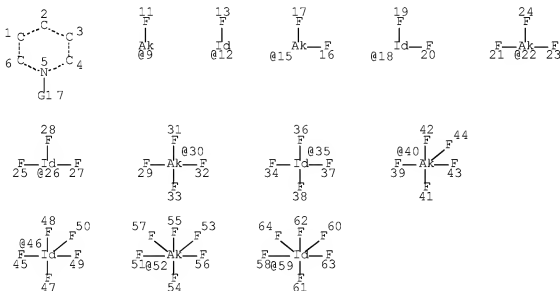
TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
 predicted properties as well as tags indicating availability of
 experimental property data in the original document. For information
 on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=> d sta que 124
 L15 STR



VAR G1=9/12/15/18/22/26/30/35/40/46/52/59

NODE ATTRIBUTES:

CONNECT IS M1 RC AT 1
 CONNECT IS M1 RC AT 2
 CONNECT IS M1 RC AT 3
 CONNECT IS M1 RC AT 4
 CONNECT IS M1 RC AT 6
 CONNECT IS M1 RC AT 52

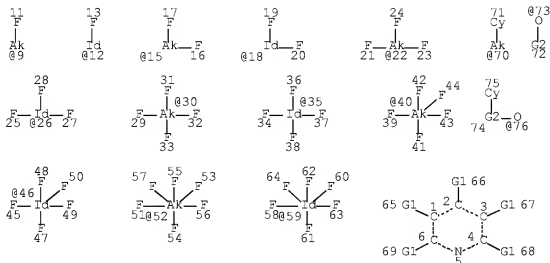
CONNECT IS M1 RC AT 59
 DEFAULT MLEVEL IS ATOM
 DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 1
 NUMBER OF NODES IS 61

STEREO ATTRIBUTES: NONE

L17 460 SEA FILE=REGISTRY CSS FUL L15
 L18 STR



VAR G1=H/X/AK/ID/CY/9/12/15/18/22/26/30/35/40/46/52/59/73/76/70

VAR G2=AK/ID

NODE ATTRIBUTES:

CONNECT IS M1 RC AT 5
 CONNECT IS M1 RC AT 52
 CONNECT IS M1 RC AT 59
 DEFAULT MLEVEL IS ATOM
 DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:

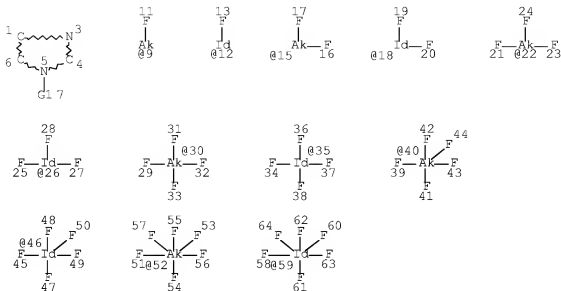
RSPEC 1
 NUMBER OF NODES IS 72

STEREO ATTRIBUTES: NONE

L20 200 SEA FILE=REGISTRY SUB=L17 CSS FUL L18
 L21 77 SEA FILE=REGISTRY ABB=ON PLU=ON L20 AND 1/NC
 L22 123 SEA FILE=REGISTRY ABB=ON PLU=ON L20 NOT L21
 L23 14 SEA FILE=REGISTRY ABB=ON PLU=ON L22 AND (C13H9F13NO OR
 C16H9F19NO OR C15H16F7N2O2 OR C9H5BRF8N OR C11H9F13NS OR
 C13H14F6NO2 OR C14H9F15NO OR W/ELS)
 L24 109 SEA FILE=REGISTRY ABB=ON PLU=ON L22 NOT L23

=> d sta que 179

L26 STR



VAR G1=9/12/15/18/22/26/30/35/40/46/52/59

NODE ATTRIBUTES:

CONNECT IS M1 RC AT 1

CONNECT IS M1 RC AT 3

CONNECT IS M1 RC AT 4

CONNECT IS M1 RC AT 6

CONNECT IS M1 RC AT 52

CONNECT IS M1 RC AT 59

DEFAULT MLEVEL IS ATOM

DEFAULT BCLEVEL IS LIMITED

GRAPH ATTRIBUTES:

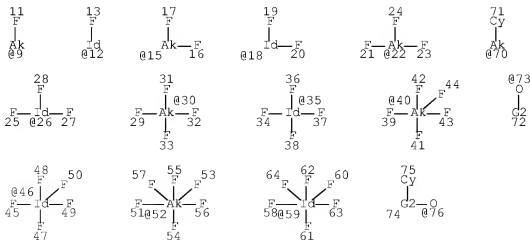
RSPEC 3

NUMBER OF NODES IS 60

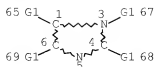
STEREO ATTRIBUTES: NONE

L28 4824 SEA FILE=REGISTRY CSS FUL L26

L30 STR



Page 1-A



Page 2-A

VAR G1=H/X/AK/ID/CY/9/12/15/18/22/26/30/35/40/46/52/59/73/76/70

VAR G2=AK/ID

NODE ATTRIBUTES:

CONNECT IS M1 RC AT 5

CONNECT IS M1 RC AT 52

CONNECT IS M1 RC AT 59

DEFAULT MLEVEL IS ATOM

DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 3

NUMBER OF NODES IS 70

STEREO ATTRIBUTES: NONE

L32 400 SEA FILE=REGISTRY SUB=L28 CSS FUL L30
 L33 218 SEA FILE=REGISTRY ABB=ON PLU=ON L32 AND 1/NC
 L34 182 SEA FILE=REGISTRY ABB=ON PLU=ON L32 NOT L33
 L35 3 SEA FILE=REGISTRY ABB=ON PLU=ON L34 NOT NCNC2/ES
 L36 179 SEA FILE=REGISTRY ABB=ON PLU=ON L34 NOT L35
 L37 126 SEA FILE=REGISTRY ABB=ON PLU=ON L36 AND 1/NR
 L75 9 SEA FILE=REGISTRY ABB=ON PLU=ON L37 AND (C10H10F13N2S OR
 C10H16F3N2O OR C11H20F3N2OSI OR C14H8F18N2 OR C19H22F17N2O3SI
 OR C10H20FN2OSI OR C10H7F10N2O)
 L76 117 SEA FILE=REGISTRY ABB=ON PLU=ON L37 NOT L75
 L77 53 SEA FILE=REGISTRY ABB=ON PLU=ON L36 NOT L37
 L78 8 SEA FILE=REGISTRY ABB=ON PLU=ON L77 AND (C16H21F3N3 OR
 C10H9F2N2 OR C8H8O3S OR C15H19F3N3 OR C9H9F8N2 OR C10H10FN2 OR
 C8H12F3N2 OR C9H14F3N2)
 L79 125 SEA FILE=REGISTRY ABB=ON PLU=ON (L76 OR L78)

=> fil hcplus

FILE 'HCPLUS' ENTERED AT 16:34:22 ON 13 AUG 2008

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FILE COVERS 1907 - 13 Aug 2008 VOL 149 ISS 7

FILE LAST UPDATED: 12 Aug 2008 (20080812/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 184 bib abs hitstr retable tot

L84 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:992639 HCAPLUS Full-text

DN 147:334506

TI Formation of ionic liquids for electrolytic capacitors

IN Ito, Toshiyuki; Tsukada, Yasuhiro; Furuya, Hiroyuki

PA Tottori University, Japan; Kaneka Corp.

SO Jpn. Kokai Tokkyo Koho, 36pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2007224001	A	20070906	JP 2006-66509	20060310
PRAI	JP 2006-14677	A	20060124		

AB The ionic liqs. contain cationic components and anionic components, where 2 F atoms are bonded to the single C atom which constitute the cationic components.

IT 947608-88-0P 947608-90-4P 947608-93-7P

947608-95-9P 947608-97-1P 947608-99-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(formation of ionic liqs. containing cationic and anionic components for electrolytic capacitors)

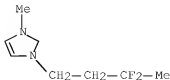
RN 947608-88-0 HCAPLUS

CN 1H-Imidazolium, 3-(3,3-difluorobutyl)-1-methyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (CA INDEX NAME)

CM 1

CRN 947608-87-9

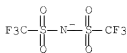
CMF C8 H13 F2 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

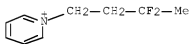
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 947608-90-4 HCAPLUS
CN Pyridinium, 1-(3,3-difluorobutyl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (CA INDEX NAME)

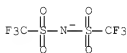
CM 1

CRN 947608-89-1
CMF C9 H12 F2 N



CM 2

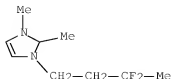
CRN 98837-98-0
CMF C2 F6 N O4 S2



RN 947608-93-7 HCAPLUS
CN 1H-Imidazolium, 3-(3,3-difluorobutyl)-1,2-dimethyl-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (CA INDEX NAME)

CM 1

CRN 947608-92-6
CMF C9 H15 F2 N2

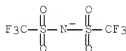


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



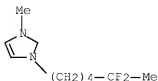
RN 947608-95-9 HCAPLUS

CN 1H-Imidazolium, 3-(5,5-difluorohexyl)-1-methyl-, compd. with
 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (CA
 INDEX NAME)

CM 1

CRN 947608-94-8

CMF C10 H17 F2 N2

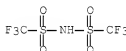


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CM 2

CRN 82113-65-3

CMF C2 H F6 N O4 S2



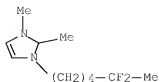
RN 947608-97-1 HCAPLUS

CN 1H-Imidazolium, 3-(5,5-difluorohexyl)-1,2-dimethyl-, compd. with
 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (CA
 INDEX NAME)

CM 1

CRN 947608-96-0

CMF C11 H19 F2 N2

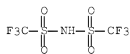


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 82113-65-3

CMF C2 H F6 N O4 S2



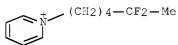
RN 947608-99-3 HCAPLUS

CN Pyridinium, 1-(5,5-difluorohexyl)-, compd. with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (CA INDEX NAME)

CM 1

CRN 947608-98-2

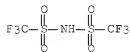
CMF C11 H16 F2 N



CM 2

CRN 82113-65-3

CMF C2 H F6 N O4 S2



L84 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:408812 HCAPLUS [Full-text](#)

DN 144:450706

TI Preparation of onium sulfonimides as ambient-temperature molten salts.
 IN Umemoto, Teruo
 PA Toyota Jidosha Kabushiki Kaisha, Japan
 SO U.S. Pat. Appl. Publ., 29 pp.
 CODEN: USXXCO

DT Patent
 LA English
 FAN.CMT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20060094882	A1	20060504	US 2004-979220	20041103
	JP 2006131615	A	20060525	JP 2005-267143	20050914
	US 20070203345	A1	20070830	US 2007-787591	20070416
	US 20070225503	A1	20070927	US 2007-787501	20070416

PRA1 US 2004-979220 A 20041103
 OS CASREACT 144:450706; MARPAT 144:450706

AB Y+ -N(SO2R)XR1 [Y+ = fluoroalkyl-substituted ammonium, sulfonium, pyridinium, (iso)thiazolium, (iso)oxazolium; R, R1 = perfluoroalkyl; RR1 = C1-4 perfluoroalkylene; X = SO2, CO], were prepared Thus, 1-methylimidazole and (2,2,2-trifluoroethyl)(phenyl)iodonium triflate were stirred 3 h in CH2Cl2 to give 1-methyl-3-(2,2,2-trifluoroethyl)imidazolium triflate. This was stirred with NaN(CO2CF3)SO2Me in H2O for 15 min. to give 70% 1-methyl-3-(2,2,2-trifluoroethyl)imidazolium N- (trifluoromethanesulfonyl)trifluoroacetamide. The latter showed a wide oxidation potential window and high ion conductivity

IT 174899-87-7P 634178-38-4P 885594-34-3P
 885594-37-6P 885594-40-1P 885594-43-4P
 885594-45-6P 885594-48-9P 885594-51-4P
 885594-53-6P 885594-55-8P 885594-58-1P
 885594-60-5P 885594-62-7P 885594-64-9P
 885594-67-2P 885594-69-4P 885594-71-8P
 RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

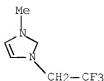
(preparation of onium sulfonimides as ambient-temperature molten salts)
 RN 174899-87-7 HCAPLUS

CN 1H-imidazolium, 1-methyl-3-(2,2,2-trifluoroethyl)-, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (CA INDEX NAME)

CM 1

CRN 174899-69-5

CMF C6 H8 F3 N2

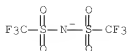


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CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



RN 634178-38-4 HCAPLUS

CN Pyridinium, 1-(2,2,2-trifluoroethyl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 106241-26-3

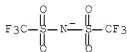
CMF C7 H7 F3 N



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



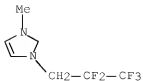
RN 885594-34-3 HCAPLUS

CN 1H-imidazolium, 1-methyl-3-(2,2,3,3,3-pentafluoropropyl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 885594-33-2

CMF C7 H8 F5 N2

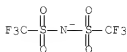


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



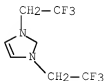
RN 885594-37-6 HCAPLUS

CN 1H-Imidazolium, 1,3-bis(2,2,2-trifluoroethyl)-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 885594-36-5

CMF C7 H7 F6 N2

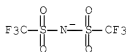


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



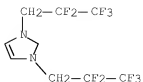
RN 885594-40-1 HCAPLUS

CN 1H-Imidazolium, 1,3-bis(2,2,3,3,3-pentafluoropropyl)-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 885594-39-8

CMF C9 H7 F10 N2

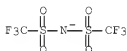


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



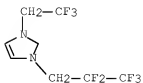
RN 885594-43-4 HCAPLUS

CN 1H-Imidazolium, 1-(2,2,3,3,3-pentafluoropropyl)-3-(2,2,2-trifluoroethyl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 885594-42-3

CMF C8 H7 F8 N2

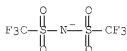


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



RN 885594-45-6 HCAPLUS

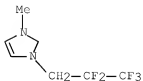
CN 1H-Imidazolium, 1-methyl-3-(2,2,3,3,3-pentafluoropropyl)-, salt with

1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide
(1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 885594-33-2

CMF C7 H8 F5 N2

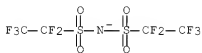


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 129318-46-3

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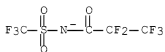
RN 885594-48-9 HCAPLUS

CN 1H-imidazolium, 1-methyl-3-(2,2,2-trifluoroethyl)-, 2,2,3,3,3-pentafluoro-N-[(trifluoromethyl)sulfonyl]propanamide (1:1) (CA INDEX NAME)

CM 1

CRN 885594-47-8

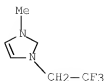
CMF C4 F8 N O3 S



CM 2

CRN 174899-69-5

CMF C6 H8 F3 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

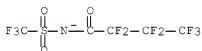
RN 885594-51-4 HCAPLUS

CN 1H-Imidazolium, 1-methyl-3-(2,2,2-trifluoroethyl)-, 2,2,3,3,4,4,4-heptafluoro-N-[(trifluoromethyl)sulfonyl]butanamide (1:1) (CA INDEX NAME)

CM 1

CRN 885594-50-3

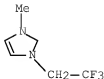
CMF C5 F10 N O3 S



CM 2

CRN 174899-69-5

CMF C6 H8 F3 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

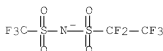
RN 885594-53-6 HCAPLUS

CN 1H-Imidazolium, 1-methyl-3-(2,2,2-trifluoroethyl)-, 1,1,2,2,2-pentafluoro-N-[(trifluoromethyl)sulfonyl]ethanesulfonamide (1:1) (CA INDEX NAME)

CM 1

CRN 601520-38-1

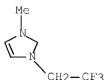
CMF C3 F8 N O4 S2



CM 2

CRN 174899-69-5

CMF C6 H8 F3 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

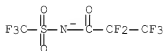
RN 885594-55-8 HCAPLUS

CN 1H-imidazolium, 1-(2,2,3,3,3-pentafluoropropyl)-3-(2,2,2-trifluoroethyl)-, 2,2,3,3,3-pentafluoro-N-[(trifluoromethyl)sulfonyl]propanamide (1:1) (CA INDEX NAME)

CM 1

CRN 885594-47-8

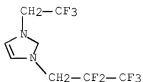
CMF C4 F8 N O3 S



CM 2

CRN 885594-42-3

CMF C8 H7 F8 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

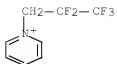
RN 885594-58-1 HCAPLUS

CN Pyridinium, 1-(2,2,3,3,3-pentafluoropropyl)-, salt with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 135654-56-7

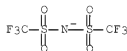
CMF C8 H7 F5 N



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



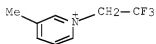
RN 885594-60-5 HCAPLUS

CN Pyridinium, 3-methyl-1-(2,2,2-trifluoroethyl)-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 635319-88-9

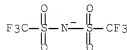
CMF C8 H9 F3 N



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



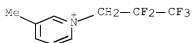
RN 885594-62-7 HCAPLUS

CN Pyridinium, 3-methyl-1-(2,2,3,3,3-pentafluoropropyl)-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 885594-61-6

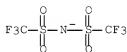
CMF C9 H9 F5 N



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



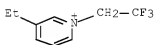
RN 885594-64-9 HCAPLUS

CN Pyridinium, 3-ethyl-1-(2,2,2-trifluoroethyl)-, salt with
 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
 (9CI) (CA INDEX NAME)

CM 1

CRN 885594-63-8

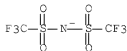
CMF C9 H11 F3 N



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



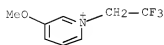
RN 885594-67-2 HCAPLUS

CN Pyridinium, 3-methoxy-1-(2,2,2-trifluoroethyl)-, salt with

1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

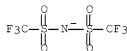
CM 1

CRN 885594-66-1
CMF C8 H9 F3 N O



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2

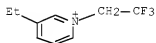


RN 885594-69-4 HCAPLUS

CN Pyridinium, 3-ethyl-1-(2,2,2-trifluoroethyl)-, salt with
2,2,2-trifluoro-N-[(trifluoromethyl)sulfonyl]acetamide (1:1) (9CI) (CA
INDEX NAME)

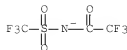
CM 1

CRN 885594-63-8
CMF C9 H11 F3 N



CM 2

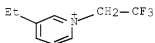
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CMF C3 F6 N O3 S



RN 885594-71-8 HCAPLUS
 CN Pyridinium, 3-ethyl-1-(2,2,2-trifluoroethyl)-, 2,2,3,3,3-pentafluoro-N-[(trifluoromethyl)sulfonyl]propanamide (1:1) (CA INDEX NAME)

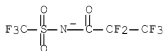
CM 1

CRN 885594-63-8
 CMF C9 H11 F3 N



CM 2

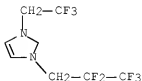
CRN 885594-47-8
 CMF C4 F8 N O3 S



IT 885595-76-6 885595-78-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of onium sulfonimides as ambient-temperature molten salts)
 RN 885595-76-6 HCAPLUS
 CN 1H-imidazolium, 1-(2,2,3,3,3-pentafluoropropyl)-3-(2,2,2-trifluoroethyl)-, 1,1,1-trifluoromethanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 885594-42-3
 CMF C8 H7 F8 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 37181-39-8
 CMF C F3 O3 S



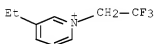
RN 885595-78-8 HCAPLUS

CN Pyridinium, 3-ethyl-1-(2,2,2-trifluoroethyl)-, 1,1,1-trifluoromethanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 885594-63-8

CMF C9 H11 F3 N



CM 2

CRN 37181-39-8

CMF C F3 O3 S



IT 174899-70-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of onium sulfonimides as ambient-temperature molten salts)

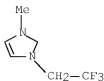
RN 174899-70-8 HCAPLUS

CN 1H-Imidazolium, 1-methyl-3-(2,2,2-trifluoroethyl)-, 1,1,1-trifluoromethanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 174899-69-5

CMF C6 H8 F3 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 37181-39-8

CMF C F3 O3 S



L84 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:1218401 HCAPLUS Full-text

DN 143:480378

TI Nonaqueous electrolytes, fireproofing agents therefor, their uses, and batteries therewith

IN Nakagawa, Hiroe; Inamasu, Tokuo; Nukuta, Toshiyuki

PA Yuasa Corporation, Japan

SO Jpn. Kokai Tokkyo Koho, 22 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----		-----	-----	-----
PI	JP 2005322417	A	20051117	JP 2004-136961	20040506
PRAI	JP 2004-136961		20040506		
OS	MARPAT 143:480378				
GI					



I



II

AB Fireproofing agents represented by R1R2R3R4N-X- [R1-R4 = C1-6 (fluoro)alkyl (essentially including fluoroalkyl); X- = F-containing anion], I, or II [R = C4-5 bivalent organic bridging group comprised of C, O, N, S, and/or P; R1, R2 = C1-6 (fluoro)alkyl (essentially including fluoroalkyl)] and their uses as a component of nonaq. electrolytes satisfying the agent content 0.1-20% are claimed. Also claimed are the nonaq. electrolytes and batteries therewith showing excellent flame retardancy while maintaining battery performance. The batteries are useful for power storage systems, elec. automobiles, etc.

IT 869536-52-7 869536-54-9

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

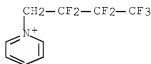
(electrolytes; quaternary ammonium-type efficient fireproofing agents for nonaq. electrolytes of secondary batteries)

RN 869536-52-7 HCAPLUS

CN Pyridinium, 1-(2,2,3,3,4,4,4-heptafluorobutyl)-, hexafluorophosphate(1-)
(1:1) (CA INDEX NAME)

CM 1

CRN 135654-58-9
CMF C9 H7 F7 N



CM 2

CRN 16919-18-9
CMF F6 P
CCI CCS



RN 869536-54-9 HCAPLUS

CN 1H-Imidazolium, 1-ethyl-3-(fluoromethyl)-, salt with 1,1,1-trifluoro-N-
[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

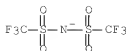
CRN 869536-53-8
CMF C6 H10 F N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



L84 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2003:1006951 HCAPLUS [Full-text](#)

DN 140:42034

TI Room-temperature molten salt, process for producing the same and applications thereof

IN Adachi, Kenji; Kuroki, Yoshichika; Sakamaki, Yuuko

PA Daikin Industries, Ltd., Japan

SO PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003106419	A1	20031224	WO 2003-JP7529	20030613
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BE, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2003242371	A1	20031231	AU 2003-242371	20030613
	US 20050175867	A1	20050811	US 2004-516296	20041208
PRAI	JP 2002-177036	A	20020618		
	JP 2003-27251	A	20030204		
	WO 2003-JP7529	W	20030613		
OS	MARPAT 140:42034				

AB The invention provides a room-temperature molten salt which is obtained by mixing two or more organic salts and has a solidifying (or melting) point lower than those of the original organic salts, a process for producing the same, and applications of the salt. The invention relates to a room-temperature molten salt consisting of a mixture of two or more organic salts different from each other both in anion moiety and in organic cation moiety, characterized by having a solidifying point lower than those of the original organic salts, a process for producing the room-temperature molten salt, and applications thereof such as (1) organic solvent, (2) extraction solvent, (3) electrolytic solution for battery, in particular non-aq. lithium secondary battery, (4) electrolytic solution or electrolyte for capacitor, in particular elec. double layer capacitor, (5) dye-sensitized solar cell, and (6) fuel cell, in particular solid polymer fuel cell. Thus, 5 mmol 3-methylpyridine and 5 mmol 2,2,2-trifluoroethyl trifluoromethanesulfonate were refluxed in 2 mL 1,1,1-trichloroethane for 2 h to give 865 mg 1-(2,2,2-trichloroethyl)-3-methylpyridinium trifluoromethanesulfonate (I) (m.p. 67.7-68.9°). I (30 mg) and 30 mg 1-(2,2,2-trichloroethyl)pyridinium bis(trifluoromethylsulfonyl)amide (preparation given, m.p. 38.3-38.8°) were thoroughly mixed to give a clear colorless liquid which had solidifying point of -87°.

IT 635320-25-1P 635320-35-3P 635320-43-3P
635320-51-3P 635320-58-0P 635320-64-8P

635320-71-7P 635320-83-1P

RL: DEV (Device component use); SPN (Synthetic preparation); TEM
 (Technical or engineered material use); PREP (Preparation); USES (Uses)

(Preparation of room-temperature molten salts consisting of two or more
 organic salts
 and applications thereof)

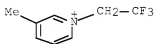
RN 635320-25-1 HCAPLUS

CN Pyridinium, 3-methyl-1-(2,2,2-trifluoroethyl)-, compd. with
 1-(2,2,2-trifluoroethyl)pyridinium 1,1,1-trifluoromethanesulfonate, compd.
 with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide
 (1:1:1) (CA INDEX NAME)

CM 1

CRN 635319-88-9

CMF C8 H9 F3 N



CM 2

CRN 106241-26-3

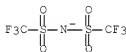
CMF C7 H7 F3 N



CM 3

CRN 98837-98-0

CMF C2 F6 N O4 S2



CM 4

CRN 37181-39-8

CMF C F3 O3 S



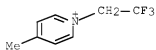
RN 635320-35-3 HCAPLUS

CN Pyridinium, 4-methyl-1-(2,2,2-trifluoroethyl)-, compd. with
1-(2,2,2-trifluoroethyl)pyridinium compd. with 1,1,1-
trifluoromethanesulfonate 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]met
hanesulfonamide (1:1:1:1) (CA INDEX NAME)

CM 1

CRN 634178-36-2

CMF C8 H9 F3 N



CM 2

CRN 106241-26-3

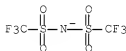
CMF C7 H7 F3 N



CM 3

CRN 98837-98-0

CMF C2 F6 N O4 S2



CM 4

CRN 37181-39-8

CMF C F3 O3 S



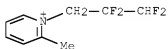
RN 635320-43-3 HCAPLUS

CN Pyridinium, 2-methyl-1-(2,2,3,3-tetrafluoropropyl)-, compd. with
 1-(2,2,2-trifluoroethyl)pyridinium compd. with 1,1,1-
 trifluoromethanesulfonate 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]met
 hanesulfonamide (1:1:1:1) (CA INDEX NAME)

CM 1

CRN 635320-05-7

CMF C9 H10 F4 N



CM 2

CRN 106241-26-3

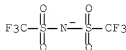
CMF C7 H7 F3 N



CM 3

CRN 98837-98-0

CMF C2 F6 N O4 S2



CM 4

CRN 37181-39-8

CMF C F3 O3 S

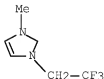


RN 635320-51-3 HCAPLUS
 CN 1H-Imidazolium, 1-methyl-3-(2,2,2-trifluoroethyl)-, compd. with
 1-(2,2,2-trifluoroethyl)pyridinium 1,1,1-trifluoromethanesulfonate, compd.
 with 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide
 (1:1:1:1) (CA INDEX NAME)

CM 1

CRN 174899-69-5

CMF C6 H8 F3 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 106241-26-3

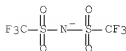
CMF C7 H7 F3 N



CM 3

CRN 98837-98-0

CMF C2 F6 N O4 S2



CM 4

CRN 37181-39-8

CMF C F3 O3 S



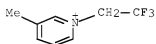
RN 635320-58-0 HCAPLUS

CN Pyridinium, 3-methyl-1-(2,2,2-trifluoroethyl)-, compd. with
 4-methyl-1-(2,2,2-trifluoroethyl)pyridinium 1,1,1-
 trifluoromethanesulfonate, compd. with 1,1,1-trifluoro-N-
 [(trifluoromethyl)sulfonyl]methanesulfonamide (1:1:1:1) (CA INDEX NAME)

CM 1

CRN 635319-88-9

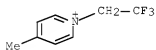
CMF C8 H9 F3 N



CM 2

CRN 634178-36-2

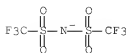
CMF C8 H9 F3 N



CM 3

CRN 98837-98-0

CMF C2 F6 N O4 S2



CM 4

CRN 37181-39-8

CMF C F3 O3 S



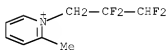
RN 635320-64-8 HCAPLUS

CN Pyridinium, 2-methyl-1-(2,2,3,3-tetrafluoropropyl)-, compd. with
 4-methyl-1-(2,2,2-trifluoroethyl)pyridinium 1,1,1-
 trifluoromethanesulfonate, compd. with 1,1,1-trifluoro-N-
 [(trifluoromethyl)sulfonyl]methanesulfonamide (1:1:1) (CA INDEX NAME)

CM 1

CRN 635320-05-7

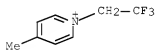
CMF C9 H10 F4 N



CM 2

CRN 634178-36-2

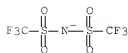
CMF C8 H9 F3 N



CM 3

CRN 98837-98-0

CMF C2 F6 N O4 S2

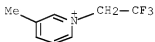


CM 4
 CRN 37181-39-8
 CMF C F3 O3 S

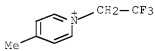


RN 635320-71-7 HCAPLUS
 CN Pyridinium, 3-methyl-1-(2,2,2-trifluoroethyl)-, compd. with
 4-methyl-1-(2,2,2-trifluoroethyl)pyridinium compd. with
 1-(2,2,2-trifluoroethyl)pyridinium compd. with 1,1,1-
 trifluoromethanesulfonate 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]met
 hanesulfonamide (1:1:1:1:2) (CA INDEX NAME)

CM 1
 CRN 635319-88-9
 CMF C8 H9 F3 N



CM 2
 CRN 634178-36-2
 CMF C8 H9 F3 N



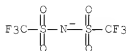
CM 3
 CRN 106241-26-3
 CMF C7 H7 F3 N



CM 4

CRN 98837-98-0

CMF C2 F6 N O4 S2



CM 5

CRN 37181-39-8

CMF C F3 O3 S



RN 635320-83-1 HCAPLUS

CN Pyridinium, 2-ethyl-1-methyl-, compd. with 1-(2,2,2-trifluoroethyl)pyridinium compd. with 1,1,1-trifluoromethanesulfonate 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1:1:1) (CA INDEX NAME)

CM 1

CRN 106241-26-3

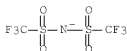
CMF C7 H7 F3 N



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



CM 3

CRN 60025-89-0

CMF C8 H12 N



CM 4

CRN 37181-39-8

CMF C F3 O3 S



IT 174899-70-8P, 1-Methyl-3-(2,2,2-trifluoroethyl)imidazolium
trifluoromethanesulfonate 634178-37-3P, 1-(2,2,2-Trifluoroethyl)-
4-methylpyridinium bis(trifluoromethylsulfonyl)amide 634178-38-4P
, 1-(2,2,2-Trifluoroethyl)pyridinium bis(trifluoromethylsulfonyl)amide
635319-89-0P, 1-(2,2,2-Trifluoroethyl)-3-methylpyridinium
trifluoromethanesulfonate 635319-99-2P, 1-(2,2,2-Trifluoroethyl)-
4-methylpyridinium trifluoromethanesulfonate 635320-06-8P,
1-(2,2,3,3-Tetrafluoropropyl)-2-methylpyridinium trifluoromethanesulfonate
RL: SPN (Synthetic preparation); PREP (Preparation)
(Preparation of room-temperature molten salts consisting of two or more
organic salts

and applications thereof)

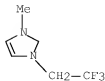
RN 174899-70-8 HCAPLUS

CN 1H-Imidazolium, 1-methyl-3-(2,2,2-trifluoroethyl)-, 1,1,1-
trifluoromethanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 174899-69-5

CMF C6 H8 F3 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 37181-39-8

CMF C F3 O3 S



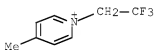
RN 634178-37-3 HCAPLUS

CN Pyridinium, 4-methyl-1-(2,2,2-trifluoroethyl)-, salt with
 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
 (9CI) (CA INDEX NAME)

CM 1

CRN 634178-36-2

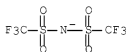
CMF C8 H9 F3 N



CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



RN 634178-38-4 HCAPLUS

CN Pyridinium, 1-(2,2,2-trifluoroethyl)-, salt with 1,1,1-trifluoro-N-
 [(trifluoromethyl)sulfonyl]methanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 106241-26-3

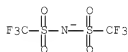
CMF C7 H7 F3 N



CM 2

CRN 98837-98-0

CMF C2 F6 N 04 S2



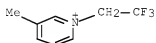
RN 635319-89-0 HCAPLUS

CN Pyridinium, 3-methyl-1-(2,2,2-trifluoroethyl)-, 1,1,1-trifluoromethanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 635319-88-9

CMF C8 H9 F3 N



CM 2

CRN 37181-39-8

CMF C F3 O3 S



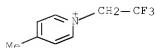
RN 635319-99-2 HCAPLUS

CN Pyridinium, 4-methyl-1-(2,2,2-trifluoroethyl)-, 1,1,1-trifluoromethanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 634178-36-2

CMF C8 H9 F3 N



CM 2

CRN 37181-39-8

CMF C F3 O3 S



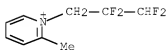
RN 635320-06-8 HCAPLUS

CN Pyridinium, 2-methyl-1-(2,2,3,3-tetrafluoropropyl)-, 1,1,1-trifluoromethanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 635320-05-7

CMF C9 H10 F4 N



CM 2

CRN 37181-39-8

CMF C F3 O3 S



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Every, H	2000	45	1279	Electrochimica Acta	
Fuji Photo Film Co Ltd	2001			JP 2001243995 A	HCAPLUS
Fuji Photo Film Co Ltd	2002			EP 1213776 A2	HCAPLUS

Fuji Photo Film Co Ltd	2002		JP 2002176188 A	HCAPLUS
Nippon Soda Co Ltd	1997		JP 09-316045 A	HCAPLUS
Watanabe, M	2003		JP 2003123791 A	HCAPLUS
Yuasa Corp	2002		JP 2002110230 A	HCAPLUS

L84 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2003:662913 HCAPLUS [Full-text](#)

DN 139:323481

TI Quaternary Salts Containing the Pentafluorosulfanyl (SF5) Group

AU Singh, Rajendra P.; Winter, Rolf W.; Gard, Gary L.; Gao, Ye; Shreeve, Jean'ne M.

CS Department of Chemistry, University of Idaho, Moscow, ID, 83844-2343, USA

SO Inorganic Chemistry (2003), 42(19), 6142-6146

CODEN: INOCAJ; ISSN: 0020-1669

PB American Chemical Society

DT Journal

LA English

OS CASREACT 139:323481

AB The first quaternary salts of a pyridine compound, a N-Me imidazole compound, a N-Pr triazole compound, and a pyridazine that contain the pentafluorosulfanyl (SF5) group were prepared and characterized. Neat reactions of the aromatic nitrogen compds. with SF5(CF2)n(CH2)mI (n = 2 or 4, m = 2 or 4) gave quaternary iodides, and which were metathesized with LiN(SO2CF3)2 to form the bis(trifluoromethylsulfonyl)amides in high yields. With the exception of the pyridine bis(trifluoromethylsulfonyl)amide salts, the compds. melted or exhibited a Tg at <0 °C. The methylimidazolium, pyridinium, and pyridazinium salts exhibited densities of .apprx 2 g/cm3. Particularly striking was the d. of CF3(CF2)5(CH2)2-pyridazinium N(CF3SO2)2 measured at 2.13 g/cm3; however, an atypically high d. for the 1-CF3(CF2)5(CH2)2-3-Me imidazolium amide was also observed at 1.77 g/cm3. All quaternary salts were characterized via IR, 19F, 1H, and 13C NMR spectra and elemental analyses.

IT 613246-73-4P 613246-74-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of pentafluorosulfanyl group-containing quaternary salts of pyridines, pyridazine, Me imidazole, and Pr triazole compds.)

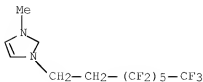
RN 613246-73-4 HCAPLUS

CN 1H-imidazolium, 1-methyl-3-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)-, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(CA INDEX NAME)

CM 1

CRN 313475-49-9

CMF C12 H10 F13 N2

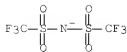


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 98837-98-0

CMF C2 F6 N O4 S2



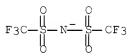
RN 613246-74-5 HCAPLUS

CN Pyridinium, 1-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 98837-98-0

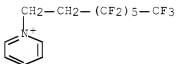
CMF C2 F6 N O4 S2



CM 2

CRN 89001-04-7

CMF C13 H9 F13 N



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Ait-Mohand, S	2002	4	3013	Org Lett	
Anon				Private communicatio	
Astleford, B	1989	54	731	J Org Chem	HCAPLUS
Bonhote, P	1996	35	1168	Inorg Chem	HCAPLUS
Bowden, R	2000	56	3399	Tetrahedron	HCAPLUS
Castro, V	1995	33	506	Magn Reson Chem	
Coates, W	1996	6	11	Comprehensive Hetero	HCAPLUS
Commins, D	1996	5	37	Comprehensive Hetero	
Davis, J	1999		1621	Tetrahedron Lett	HCAPLUS
de Keyzer, R	1995			EP 0677790	HCAPLUS
Dzyuba, S	2002	3	161	Chemphyschem	HCAPLUS
Earle, M	2000	72	1391	Pure Appl Chem	HCAPLUS
Gard, G	1998	39	962	Polym Prepr	HCAPLUS

Garratt, P	1996	4	127	Comprehensive Hetero	HCAPLUS
Grimmett, M	1996	3	77	Comprehensive Hetero	HCAPLUS
Hamel, N	1995	71	209	J Fluorine Chem	HCAPLUS
Holbrey, J	1999	1	223	Clean Products Proce	HCAPLUS
Jesih, A	1993	34	383	Polym Prepr	HCAPLUS
Jones, S	1990	90-17	273	Proceedings of the S	HCAPLUS
Kirsch, P	1999	38	1989	Angew Chem, Int Ed	HCAPLUS
Kirsch, P	2000	39	4216	Angew Chem, Int Ed	HCAPLUS
Kirsch, P	1999	121	11277	J Am Chem Soc	HCAPLUS
Lang, S	1992	4	107	Prog Heterocycl Chem	HCAPLUS
Ma, M	1995	73	593	Can J Chem	HCAPLUS
Ma, M	1994	94-13	179	Proceedings of the N	HCAPLUS
Matsumoto, H	2000		1430	Chem Lett	HCAPLUS
Merrill, C	1962			Ph D Thesis, Univers	
Mirzaei, Y	2003		24	Synthesis	
Mirzaei, Y	2002	67	9340	J Org Chem	HCAPLUS
Pigos, J	2001	13	1326	Chem Mater	HCAPLUS
Seddon, K	1997	68	351	J Chem Technol Biote	HCAPLUS
Sheppard, W	1962	84	3072	J Am Chem Soc	HCAPLUS
Singh, R	2003		1366	Chem Commun	HCAPLUS
Singh, R	2003		1579	Synthesis	HCAPLUS
Singh, R	2002	43	9497	Tetrahedron Lett	HCAPLUS
Terjeson, R	1997	82	73	J Fluorine Chem	HCAPLUS
Turnbull, K	1998	10	153	Prog Heterocycl Chem	HCAPLUS
Turnbull, K	1999	11	163	Prog Heterocycl Chem	HCAPLUS
Verma, R	1994	41	125	Adv Inorg Chem	HCAPLUS
Wasserscheid, P	2002			EP 1182196	HCAPLUS
Wasserscheid, P	2002			EP 1182197	HCAPLUS
Wasserscheid, P	2000	39	3722	Angew Chem, Int Ed	
Welton, T	1999	99	2071	Chem Rev	HCAPLUS
Winter, R	1994		128	Inorganic Fluorine C	HCAPLUS
Winter, R	2002	115	107	J Fluorine Chem	HCAPLUS
Yamamoto, K	1956				

=> d his

(FILE 'HOME' ENTERED AT 13:34:09 ON 13 AUG 2008)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 13:34:23 ON 13 AUG 2008

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L1      1 S US20050175867/PN OR (US2004-516296# OR WO2003-JP7529 OR JP200
      E ADACHI/AU
L2      1 S E3
      E ADACHI K/AU
L3      703 S E3,E81,E83,E87,E88,E91
      E ADACHI NAME/AU
L4      29 S E4
      E KENJI/AU
L5      3 S E3
      E KEN JI/AU
      E YOSHICHIKA/AU
      E KUROKI/AU
      E KUROKI Y
      E KUROKI Y/AU
L6      177 S E3
      E KUROKI YOSH
      E KUROKI YOSH/AU
L7      24 S E5
      E KUROKI NAME/AU

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L8      5 S E4
        E SAKAMAKI/AU
        E SAKAMAKI YU
        E SAKAMAKI YU/AU
L9      13 S E9,E16
        E SAKAMAKI NAME/AU
L10     1 S E4
        E YUUKO/AU
        E YUKO/AU
        E DAIKIN/CO
L11     5116 S E17-E40/CO,PA,CS
        E E33+ALL
L12     6567 S E2+RT OR E2-E20/PA,CS
L13     1 S L1 AND L2-L12
        SEL RN

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FILE 'REGISTRY' ENTERED AT 13:40:13 ON 13 AUG 2008

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L14     18 S E1-E18
L15     STR
L16     2 S L15 CSS SAM
L17     460 S L15 CSS FUL
        SAV TEMP L17 LEE516A/A
L18     STR L15
L19     7 S L18 CSS SAM SUB=L17
L20     200 S L18 CSS FUL SUB=L17
        SAV TEMP L20 LEE516B/A
L21     77 S L20 AND 1/NC
L22     123 S L20 NOT L21
L23     14 S L22 AND (C13H9F13NO OR C16H9F19NO OR C15H16F7N2O2 OR C9H5BRF8
L24     109 S L22 NOT L23
L25     1 S L17 AND NCNC2/ES
L26     STR L15
L27     23 S L26 CSS SAM
L28     4824 S L26 CSS FUL
        SAV TEMP L28 LEE516C/A
L29     STR L18
L30     STR L29
L31     13 S L30 CSS SAM SUB=L28
L32     400 S L30 CSS FUL SUB=L28
        SAV TEMP L32 LEE516D/A
L33     218 S L32 AND 1/NC
L34     182 S L32 NOT L33
L35     3 S L34 NOT NCNC2/ES
L36     179 S L34 NOT L35
L37     126 S L36 AND 1/NR

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FILE 'HCAPLUS' ENTERED AT 15:39:04 ON 13 AUG 2008

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L38     1 S US20070015933/PN
        SEL RN

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FILE 'REGISTRY' ENTERED AT 15:39:10 ON 13 AUG 2008

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L39     15 S E19-E33
L40     11 S L39 NOT (C7H6O2 OR C8H16O2 OR C2H3CL OR C5H12O2)
L41     10 S L40 NOT 1115-20-4

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FILE 'HCAPLUS' ENTERED AT 15:40:11 ON 13 AUG 2008

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L42     212 S L41
L43     27 S L42 AND PY<=2006 NOT P/DT
L44     182 S L42 AND (PD<=20060718 OR PRD<=20060718 OR PRD<=20060718) AND
L45     209 S L43,L44

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L46      76 S L45 AND US/PC
L47      81 S L45 AND US/PRC,AC
L48      81 S L46,L47
L49      76 S L48 AND (PD<=20050715 OR PRD<=20050715 OR AD<=20050715)
L50      71 S L49 AND US/PC
L51      32 S L49 AND PLASTIC?/SC,SX
L52      34 S L49 AND ?PLASTIC?
L53      41 S L51,L52

FILE 'REGISTRY' ENTERED AT 15:44:11 ON 13 AUG 2008
L54      1 S L39 AND PVC

FILE 'HCAPLUS' ENTERED AT 15:44:16 ON 13 AUG 2008
L55      4 S L54 AND L49
L56      2 S L55 AND (SAND ? OR SAITO ?)/AU

FILE 'REGISTRY' ENTERED AT 15:45:42 ON 13 AUG 2008
L57      3 S 4196-89-8 OR 28510-23-8 OR 375855-81-5

FILE 'HCAPLUS' ENTERED AT 15:46:45 ON 13 AUG 2008
L58      208 S L57
L59      169 S L58 AND (PD<=20050715 OR PRD<=20050715 OR AD<=20050715) AND P
L60      15 S L58 AND L54
L61      15 S L45 AND L54
L62      15 S L60,L61
L63      15 S L56,L62

FILE 'REGISTRY' ENTERED AT 15:49:08 ON 13 AUG 2008
L64      7 S L41 NOT L57

FILE 'HCAPLUS' ENTERED AT 15:49:34 ON 13 AUG 2008

FILE 'REGISTRY' ENTERED AT 16:02:40 ON 13 AUG 2008
L65      1 S 23144-57-2

FILE 'HCAPLUS' ENTERED AT 16:02:49 ON 13 AUG 2008
L66      5 S L65
L67      4 S L66 AND PY<=2005
L68      4 S L66 AND (PD<=20050715 OR PRD<=20050715 OR AD<=20050715) AND P
L69      1 S L67 NOT P/DT
L70      0 S L66 NOT L68,L69
L71      5 S L66-L70
L72      1 S L71 AND L54
L73      2 S L71 AND ENGLISH/LA
L74      3 S L71 NOT L73

FILE 'REGISTRY' ENTERED AT 16:22:53 ON 13 AUG 2008
L75      9 S L37 AND (C10H10F13N2S OR C10H16F3N2O OR C11H20F3N2OSI OR C14H
L76      117 S L37 NOT L75
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L77      53 S L36 NOT L37
L78      8 S L77 AND (C16H21F3N3 OR C10H9F2N2 OR C8H8O3S OR C15H19F3N3 OR
L79      125 S L76,L78
          SAV TEMP L79 LEE516F/A

FILE 'HCAPLUS' ENTERED AT 16:29:49 ON 13 AUG 2008
L80      1 S L25
L81      104 S L24
L82      55 S L79
L83      5 S L81 AND L82

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L84 5 S L80,L83
 SEL RN

 FILE 'REGISTRY' ENTERED AT 16:30:21 ON 13 AUG 2008
L85 190 S E34-E223
L86 1 S L24 AND NCNC2/ES
L87 1 S L25,L86
L88 25 S L85 AND L24
L89 18 S L85 AND L79

 FILE 'REGISTRY' ENTERED AT 16:34:14 ON 13 AUG 2008

 FILE 'HCAPLUS' ENTERED AT 16:34:22 ON 13 AUG 2008

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